

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

GRIFFIN et al.

Atty Ref. 16383-2

Serial No.: 10/619,154

Art Unit: 3634

Filed: July 14, 2003

Examiner: Gregory J. Strimbu

For: SECURITY DEVICE FOR A DOOR

Honorable Commissioner of Patents and
Trademarks
Washington, DC 20231

EVIDENTIARY DECLARATION OF CHRISTOPHER WILLIAM CAMPAGNARO

Commissioner:

I, Christopher William Campagnaro, hereby say and declare:

1. I am a finish carpenter and locksmith by trade. As a finish carpenter I have over 23 years of experience in the construction of residential and other buildings. I received my certification as a locksmith from The Academy of Locksmithing of Scarborough, Ontario, Canada in 2001. I have installed or repaired thousands of doors as well as thousands of locks, locksets, door knobs or handles and other forms of door hardware.
2. I have worked for Jaimco Doors and Windows Inc. (Jaimco), of Toronto, Ontario, Canada, as a Project Manager since 1992. Jaimco is an insurance contractor that works for the major insurance companies in the Toronto area in responding to claims

resulting from break-ins. In the context of door systems, this work includes investigating break-ins where forced entry was made by compromising a door system, assessing the extent of damage caused by the break-in, suggesting causes of failure of doors and their security devices, providing temporary security for the affected door and then providing permanent repairs, optionally with improved security devices, to the door. As project manager, I perform some of this work myself and also oversee other finish carpenters and locksmiths doing this work. With Jaimco, I have been involved in responding to thousands of claims resulting from forced entry through a door.

3. I have reviewed US Patent Application No. 10/619,154. The named inventor is James Patrick Griffin Jr. I know Mr. Griffin since he is the owner of Jaimco. However, the opinions in this declaration are my own.

4. I also know Mr. Griffin as the owner of a company that produces the Safe Door SystemTM. Jaimco has been a distributor of the Safe Door System since 2004. I have been involved in the installation of over a thousand of these systems. The Safe Door System includes a metal channel that is installed onto the edge of a door and an enlarged strike plate, as shown in Figures 2, 2a, 2b and 3 of the patent application

5. I have also reviewed three older patent documents that were given to me by Mr. Griffin's patent agent, Scott Pundsack. The first is US Patent No. 306,806 invented by E. Barnes. The second is US Patent No. 2,489,072 invented by H. Ausubel. The third is UK Patent Application GB 2,265,664 A by Thomas Smith. I will discuss these below.

6. The Barnes patent is from 1884. It shows a paneled door. The door would have been of rail and stile construction. In this type of construction, a frame of solid pieces of wood forming horizontal rails and vertical stiles is assembled together, with thinner panels inserted into grooves in the rails and stiles to complete the door.

7. Barnes says that his device is a door protector "to prevent their warping out of shape, while at the same time they are increased in strength at the point which has been weakened by the mortise into which the mortised lock usually employed is inserted." (lines 13-17). The warping problem is mentioned again at lines 60-65 and seems to be the primary purpose of the protector. This is consistent with rail and stile construction because solid lumber is prone to warp over time or with changes in humidity. Mortised locks have their mechanism contained in a large metal case. For example, the case may be 7 or 8 inches high, 3 to 4 inches deep and about 7/8 of an inch thick. Unlike tubular locksets, the type most commonly used currently, the mortise lock case extends at its full height from the edge of the door to beyond the door knob. This requires a corresponding large mortised cavity to be made into the edge of the door.

8. Barnes does not say that his door protector strengthens any part of the door other than around the lock mortise cavity, and I would not expect it to. In a rail and stile door, the grain of the wood runs vertically along the front edge (the edge with the lockset) of the door. Barnes' device requires driving multiple screws into this edge of the door. Putting screws into the edge of a door in this way makes the door weaker. In my work, I have seen numerous doors that were kicked in and failed because the edge of the door split apart. The split almost always passes through a screw hole because a screw driven into the edge of the door in the direction shown by Barnes creates a weak spot in the door.

9. The only strengthening of the door claimed by Barnes is in the area of the mortised lock, as mentioned at lines 14-17. There is a very large opening D around the lockset in Barnes' door protector with flanges marked as C in this area. At lines 34 to 42, Barnes says that these flanges C extend a little above and below the mortise area

to strengthen the door where it has been weakened by the mortise. At lines 39-41 Barnes says that the flanges themselves can be screwed to the door. Because the case of the mortise lock extends to the area under the flanges C, the flanges C might help keep the case of the mortise lock within the door. I have never seen a device as shown in the Barnes patent in use.

10. The Ausubel patent is called a Protective Door Plate but it is not a security device. The idea of Ausubel's door plate is "... to prevent the door from becoming soiled near the handle thereof ..." (Column 1 lines 5-9). At column 2, lines 36 – 40, Ausubel says that, "The plate or shield as it may be called may be made of Celluloid or other plastic or like material, the principal object being merely to provide a thin light and washable cover over that area of the door." There are two versions shown. In the version of Figures 1, 2, 3 and 9, the door plate is a simple L-shaped piece tacked to the door. The version of Figures 4 to 8 has an additional lip that fits into a groove in the edge of the door. At column 1, lines 25 – 30, Ausubel says that this version prevents the door plate from being peeled off if the part wrapped around on the edge of the door contacts the door jamb. Ausubel does not say that either version strengthens the door or provides security in any way and I would not expect them to. The second version would weaken the door significantly because it requires a groove in the edge of the door.

11. The Ausubel patent is from 1946 and I have never seen a doorplate as shown in that patent in use. Protecting a door from getting dirty or scratched near the door handle has been done since I began working with an escutcheon plate, and/or a push plate. Modern escutcheon plates do not usually wrap around the edge of the door but might extend to the edge of the door. The typical escutcheon plate is a thin flat plate of plastic or metal with a small hole for the shaft of a door knob, and often another small hole for the deadbolt. The escutcheon plate is installed by removing the door

hardware, attaching the escutcheon plate to the surface of the door with screws or an adhesive backing of the escutcheon plate, then reinstalling the door hardware. Both the escutcheon plate and the push plate may be decorative as well as protecting the door from getting dirty or scratched, but do not add any security features.

12. Ausubel provided cut-outs 18, 19 or 20 in his door plate which would avoid removing the door knob and leaves the rosette (the flanged part of the door knob that normally contacts the face of the door) directly against the surface of the door. With locksets made since I began working, the door knob is fairly easily removed and the connection between the door knobs on either side of the door allows for a variable thickness of door between them. Removing the door knob and placing the escutcheon plate below it is inconvenient but not a serious problem. On the other hand, placing the escutcheon plate under the door knob avoids the gap around the rosette and deadbolt shown in Ausubel's patent. It would be difficult to avoid those gaps while still having a door plate come close enough to the rosette to provide protection from fingerprints or scratching because the rosettes do not have a standard size. With a modern lockset, I think that the typical escutcheon plate or push plate provides a better way to avoid dirt or scratching on the surface of the door near the lockset.

13. The Smith application relates to a security device. Devices similar to what is shown by Smith as "first plate 2" have been in use for at least 12 years. They are commonly called a wrap around plate. They are similar to an escutcheon plate in that the door hardware is removed, the plate installed, and then the hardware reinstalled so that the rosette of the door knob rests against the plate rather than directly against the door. However, wrap around plates are unlike an escutcheon plate in that they wrap around the edge of the door and extend beyond the lockset on both sides of the door. Smith describes his security device as reinforcing the doors, "in proximity to their

locking mechanisms' (Page 5, lines 6-7) and the wrap around plates that I have seen in use are also used to reinforce the lockset area of the door.

14. I was given by Mr. Pundsack and reviewed an Office Action with a mail date of September 3, 2008. In particular, Mr. Pundsack, asked me to read pages 4 to 10 of the Office Action and comment on certain points, which I will discuss below.

15. The bottom of Page 5 to the top of page 6 of the Office Action refers to a U-shaped reinforcing member in the Smith application being over-bend mounted to the edge of the door, without being screwed to the door, wherein force applied to the front or rear surface of the door will be transmitted through at least one locking member to the second reinforcing member and the door frame. The Office Action points to page 5, lines 17 to 18 of the Smith application which state that the first plate 2 is adapted to fit snugly over the end of the door. The next sentence in the Smith application adds that the internal distance between the front and rear sides of the first plate 2 are approximate the width of the door. This paragraph (page 5, lines 17 to 21) says to me that the internal width of the first plate 2 should be close to the external width of the door. For example, if the first plate 2 is made for a standard 1.75" wide door, then the internal width of the first plate 2 should be 1.75" and not much more. However, the Smith application does not suggest to me that the first plate 2 is over bend mounted.

16. Over bend mounting, in the context of a U-shaped channel fit over the edge of a door, means to me that the channel must be sprung open to fit over the door and then exerts some clamping force against the door when installed. I do not think that the plate in the Smith application is over-bend mounted, or that the snug fit mentioned by Smith enables forces to be transmitted from a surface of the door through a locking member to the second reinforcing member and the door frame. The plate described by Smith may be snugly fit and of approximately the width of the door, but this suggests to

me only something similar to wrap around plates that I have seen in the market. With wrap around plates that I have used, the inside width of the plate is approximately the width of the door, and the plates fit snugly to the door in the sense that there is very little or almost no gap between the plate and the door. However, there is no noticeable clamping force of the wrap-around-plate against the door. The wrap around plate is easy to slide around on the door, and may even fall under its own weight until it is screwed to the door or the lockset is reinstalled.

17. The paragraph between pages 9 and 10 of the Office Action states that the plate described by Smith could be mounted to the door without screws because it has a snug fit, and that page 6, lines 2-4 does not state that the plate is actually screwed to the door. I do not agree with these statements. As I discussed above, I do not think that the reference to a snug fit in the Smith application means that there is any clamping force of the plate to the door sufficient to hold the plate in place. Further, I think that Smith does describe using screws to hold the plate in place and that these screws are responsible for transferring forces and are necessary. For example, at page 2, line 33 to page 3, line 3, Smith describes providing holes in the plate for fastening means such as screws. Page 6, lines 2 -4 refer to apertures for screwing the plate to the door, which tells me that screws will be inserted into the apertures. In the next sentence, Smith says that "the greater the number of such fastening means, the less stress required to be absorbed by each ..." Since the fastening means, which I understand to be screws, are absorbing stress, there must be screws and the screws are what transfers forces when someone tries to break into the door.

18. The last paragraph on page 6 of the Office Action says that, "... it would have been obvious to provide a U-shaped reinforcing member of British Patent Application No. 2 265 664 with a length extending the full length of the door, as taught by Barnes, to increase the strength of the reinforcing member .." I do not agree with this

statement. When I look at the Smith application and Barnes patent together, I note that both emphasize strengthening only the area near the lockset. Smith, for example, says at page 5, lines 23 -26 that, "the plate should be a suitable height and width to reinforce and strengthen the door in the proximity of as many locking mechanisms as required." In the next sentence Smith notes that a larger plate will provide a greater area over which stresses are absorbed but I read this as still referring to a plate that covers only the area close to the lockset. Barnes, at lines 34 to 42, says that the flanges C should extend a little above and below the mortise area to strengthen the door where it has been weakened by the mortise. Both documents are consistent in that they discuss strengthening the door only near the lock set. The part B of Barnes' device that extends the length of the door is only described as preventing warping. Nothing in the Barnes patent suggest to me that the part B of Barnes' device improves the security of the door and, as I discussed above, I think it probably weakens the door.

19. I do not think that the Barnes patent makes it obvious to extend the U-shaped plate shown in Smith to the full length of the door. Making the plate shown in Smith that large would also make it more expensive, harder to install and visually unappealing. Over the past 12 years I have seen wrap around plates and some are larger than others. However, I have not seen any that are more than about 14" in height.

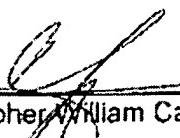
20. The first two paragraphs of page 7 of the Office Action describe the Ausubel patent and state that it would have been obvious to provide the U-shaped plate as shown in the Smith application with side members as taught by Ausubel to enable the security system to be easily retrofitted to existing doors. I do not agree with these paragraphs. The first line on page 7 describes Ausubel as a security system. The Ausubel patent does not describe a security system, but instead describes a plate to protect the appearance or finish of a door from fingerprints or scratches. Ausubel does not claim that his device increases the security of a door, and I would not expect it to.

21. I do not think that it would be obvious to modify the plate shown in the Smith application with side members as taught by Ausubel. As I discussed with escutcheon plates or push plates, the problems or disadvantages created by trying to fit a cut-out to the rosette are greater than the problem created by removing the lockset. The same would be true of wrap around plates. I think that a typical locksmith or finish carpenter would rather leave the device in Smith as it is and remove the lockset. This would be preferable to using cut outs in the sides of the plates because that would require having to stock plates with cut outs of various sizes to accommodate rosettes of various sizes. I expect that homeowners would complain that the cut outs are ugly, particularly in the area on the far side of the rosette from the edge of the door.

22. I also think that it would be apparent to someone who has seen doors broken into that a device as in Smith will work better if parts of the lock set pass through a hole in the plate. In that way, the lock set helps secure the plate to the door, and if the screws fail the plate is still held on by the lock set. Putting cut outs as shown in Ausubel into the plate of Smith would weaken the plate of Smith. I have seen wrap around devices similar to the one shown in Smith fail in use. I do not think that a person working with security systems would choose to make one weaker by cutting out the sides as in Ausubel.

I declare that further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

By


Christopher William Campagnaro

Date: Jan/26/2009